



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

11A

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,225	03/25/2005	Toshiyuki Tanaka	1035-580	8832
23117	7590	10/31/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			DUDEK, JAMES A	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/529,225	TANAKA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	James A. Dudek	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/06,3/05</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-2 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US 6753939 B2 (939).**

Per claim 1, 939 teaches a transfective panel comprising a reflective region and a transmissive region, the reflective region and the transmissive region being provided for each pixel [5,6] and a diffuser process being performed on in a portion corresponding to the reflective region [23].

Per claim 2, the panel of claim 1, further comprising a color filter having a colored layer formed in a portion corresponding to both the transmissive region and the reflective region [29] and a transparent layer formed on in a portion corresponding to the reflective region, wherein the diffusion process is performed on in the portion corresponding to the reflective region, by using at least part of the transparent layer as a diffuser processed layer [23].

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

Art Unit: 2871

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over 939 in view of US 6885418 B2 (418).**

Per claim 3, 939 teaches the panel of claim 2, but lack the color filter in the reflective region having an aperture through the colored layer and a transparent layer is formed in the aperture. However, 418 teaches apertures in the color filter at the region corresponding to the reflective electrode for increasing color reproducibility. See column two last full paragraph. *Accordingly, it would have been obvious to one of ordinary skill at the time of invention to combine the apertures of 418 with 939 to improve color reproducibility.*

**Claim 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over 939 in view of US 6476889 B2 (889).**

Per claims 4-5, 939 lacks the color filter thickness twice as thick in the transmission region. However, 889 teaches a color filter layer in the transmission region thicker because light passes through the reflective region twice. Thus matching the color fidelity for the transmissive and reflective modes. Although not explicitly taught, using half thickness for the reflective region was within the level of ordinary skill. *Accordingly, it would have been obvious to one of ordinary skill at the time of invention to combine the color filter of 889 with 939.*

**Claim 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over 939 in view of US 6809791 B2 (791).**

939 lacks the color filter step difference creating a thinner gap in the reflective region and the gap thickness in the reflective region being half that in the transmissive region. However, 791 teaches a step in the color filter for improved color purity. Furthermore, it was well known to decrease the thickness of the liquid crystal layer in the reflective region by half since light travels through the reflective region twice. *Accordingly, it would have been obvious to one of ordinary skill at the time of invention to combine 791 with 939.*

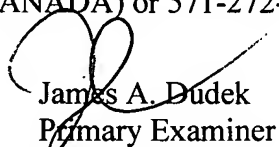
**Claim 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over 939 in view of US 7002642 B2, US 6816207 B2, US 6437915 B1, US 6246451 B1, US 6055013 A, US 5875055 A and US 5493427 A.**

Per claims 9-10, 939 lack the parallax barrier and the switching cell. However, it was well known to place switching cells and parallax barriers between the display and the viewer to create three-dimensional images. US 7002642 B2, US 6816207 B2, US 6437915 B1, US 6246451 B1, US 6055013 A, US 5875055 A and US 5493427 A evidence that it was well known.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Dudek whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
James A. Dudek  
Primary Examiner  
Art Unit 2871